

Temporary stream crossings are utilized where construction traffic needs to travel over small streams and wetlands. The crossing consists of filter fabric on the existing ground, pipe(s) installed to convey stream flow, with stone placed around the pipe(s). If crossing is not located in a permitted area, appropriate permits from the U.S. Army Corps of Engineers and/or N.C. Division of Water Quality will need to be obtained. Do not utilize temporary stream crossings in areas of high flow.

AREAS OF USE:

- On small streams or wetlands where construction vehicles need to be moved from one side of stream to the other for a short period of time.

PLACEMENT:

- On construction sites inside permitted areas, if possible, in small streams and wetlands.

DESIGN CRITERIA:

- Pipe(s) for temporary stream crossing shall be designed to pass the peak or bankfull flow, whichever is less, from a 2-year peak storm, without overtopping.

CONSTRUCTION SPECIFICATIONS:

- Place filter fabric on streambed channel, along streambanks and into flood plain a minimum of 15 feet.
- More than one temporary pipe may be used, and size and number shall be determined in the field.
- Structural stone of crossing shall be class B and placed around the temporary pipe(s).
- Place class B stone to a minimum of 12 inches over the pipe(s).
- No. 57 stone shall be placed on top of the class B stone at a minimum depth of 6 inches and tied into existing ground.
- Slope of approaches to stream crossing should be no steeper than 10:1.
- Construct the width of the stream crossing to be the same as the construction access road.

MATERIAL SPECIFICATIONS:

- Filter fabric shall be Type 2 and meet the requirements of Section 1056 of the Standard Specifications for this material.
- Class B stone shall meet the requirements of Section 1042 of the Standard Specifications for Rip Rap, Class B.
- No. 57 stone shall meet the requirements of Section 1005 of the Standard Specifications for these stone sizes.
- Temporary pipe(s) should have adequate strength to withstand stone and equipment loads.

TEMPORARY STREAM CROSSING

DETAIL

PAYMENT:

- Installation of measure:

Filter Fabric for Drainage

Square Yard

Riprap, Class _____

Ton

No. 57 Stone

Ton

___" Temporary Pipe – For Stream Crossing

Linear Foot

MAINTENANCE:

- Filter fabric, stone, and pipe(s) should be inspected after each significant rainfall.
- Any damage to the temporary pipe(s) should be repaired or replaced immediately.
- Any class B or No. 57 stone that gets washed away should be replaced.
- Clean pipe(s) if clogged with debris.

TYPICAL PROBLEMS:

- Pipe(s) are damaged by vehicle traffic due to inadequate wall thickness.
- Inadequate amount of class B stone around pipe(s) causing temporary stream crossing to wash away during a rain event.
- Filter fabric not placed underneath stone and pipe(s) properly causing runoff to undermine the device.
- Inadequate maintenance.